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**Perancangan Sistem Knowledge Management**  
Divisi HR & Services International Oil Company  
Akhrum Rakhmat Andriarto; Raynaldo Phirsan Heydemans;  
Yunus Widjaja; Richard Kumaradjaja

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**Menggunakan Panduan Manajemen COBIT**  
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## IT GOVERNANCE

Corporate governance is a set of responsibilities and practices used by an organization's management to provide strategic direction; thereby, ensuring that goals are achievable, risks are properly addressed and organizational resources are properly utilized.

IT governance is specifying the decision rights and accountability framework to encourage desirable behavior in using IT. IT governance is not about making specific IT decision – management does that – but rather determines who systematically makes and contributes to those decisions. IT governance reflects broader corporate governance principles while focusing on the management and use of IT to achieve corporate performance goals. Effective IT governance encourages and leverages the ingenuity of enterprise's overall vision and values. All enterprise has IT governance. Those with effective governance have actively designed a set of IT governance mechanisms committees, budgeting processes, approvals, and so on that encourage behavior consistent with the organization's mission, strategy, values, norms, and culture. In these enterprises, IT can factor significantly into competitive strategy. In contrast, enterprises that govern IT by default more often find that IT can sabotage business strategy. On financial services firm was pursuing a cost reduction strategy. Rather than create a comprehensive set of mechanisms that would encourage cost saving, this firm relied on a new chargeback system to curtail demand for IT services. When the chargeback system led to bickering among IT and business managers, the CIO assigned relationship managers to restore internal customer satisfaction. They improve satisfaction scores but did not lower IT or business process costs. Without a cohesive IT governance design, enterprises must rely on their CIOs to ameliorate problems through tactical solutions rather than position IT as a strategic asset.

IT Governance is a structure of relationship and processes used to direct and control the enterprise toward achievement of the enterprise's goals by adding value while balancing risk versus return over IT and its processes. Use of technology in all aspects of economic and social endeavors has created a critical dependency of information technology to initiate, record, move and manage all aspects of economic transaction, information and knowledge, creating a critical place for IT governance within enterprise governance.

Based on review from ISACA in CISA review manual, IT governance is an inclusive term that encompasses information system, technology and communication: business, legal and other issues; and all concerned stakeholder, directors, senior management, process owners, IT suppliers, users, and auditors. Governance helps ensure the alignment of IT and enterprise objectives. Enterprises are governed by generally accepted good or best practices, the assurance of which is guaranteed by certain controls. From these practices flow the organization's direction, which indicates certain activities, using the organization's resources. The results of these activities are measured and reported on, providing input to the revision and maintenance of controls.

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IT is also governed by good or best practices that ensure that the organization's information and related technology support its business objectives, its resources are used responsibly, and its risks are managed appropriately.

IT governance is the responsibility of the board of directors and executive management. It is an integral part of enterprise governance and consist of the leadership and organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategy and objectives (ITGI, 2004).

A key element of IT governance is the alignment of business and IT leading to the achievement of business value. This high value goal can be achieved by aligning IT governance framework with best practices. Such a framework and practices should be composed of a variety of structures, processes and relational mechanisms.

#### IT Governance Structure of Relationship.

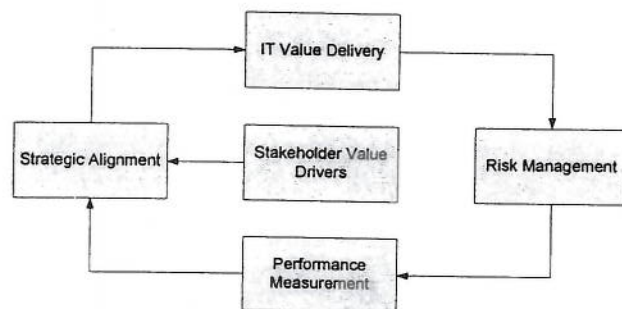


Figure 1 IT Governance Structure of Relationship

#### IT Governance Domains

Fisrt, IT strategic alignment. Alignment of IT has been synonymous with IT strategy, i.e., does the IT strategy support the enterprise strategy? For IT governance, alignment encompasses more than strategic integration of the (future) IT organization with the (future) enterprise organization. It also deals with the alignment of IT operations with the current enterprise operations and the ability to build the capabilities necessary to deliver business value. This state of harmony is referred to as alignment.

Second, IT value delivery. The basic principles of IT value creation are delivering on time, staying within budget and generating the benefits that were identified and promise. Hence, IT processes must be designed, deployed and operated in an efficient and effective way that meets these delivery expectations and objectives. The value that IT delivers should be aligned directly with the values on which the business is focused, and be measured in a way that transparently shows the impact and contribution of the IT investment in the value creation process of the organization.



Third, risk management. Whereas value delivery focuses on the creation of value, risk management covers the value preservation processes. Internal control requirements and the need to demonstrate sound enterprise governance to shareholders, customers, and other stakeholders are the main drivers for increased risk management activities in organizations. Risk management should be a continuous process that starts with the identification of risks (impact on assets, threats and vulnerabilities). Once identified, risks must be mitigated by countermeasures (control), and the residual risk should be formally accepted.

Fourth, it resource management. It ensures that an integrated, economical IT infrastructure is provided, wherein new technology is introduced judiciously, and obsolete systems are updated or replaced. It recognized the importance of people in addition to hardware and software, therefore focusing on maintaining availability, providing training, promoting retention and ensuring competence of key IT personnel.

Fifth, performance measurement. Without establishing and monitoring performance measures, it is unlikely that the previous phases (IT strategic alignment, IT value delivery, risk management and IT resource management) will achieve their desired outcomes. The performance measurement domain closes the loop and provides feedback to the alignment domain by providing evidence that the IT governance initiative is on track and creating the opportunity to take timely corrective measures.

The purpose of IT governance is to direct IT endeavor to ensure that IT's performance meets the objectives of aligning IT with the enterprise's objectives and the realization of promised benefits. Additionally, IT should enable the enterprise by exploiting opportunity and maximizing benefits. IT resources should be used responsibly, and IT related risks should be managed appropriately.

## PRINCIPLES OF IT GOVERNANCE

In the past, running an IT organization as a support function – a function separate and distinct from the business – was a common practice. Now, most IT infrastructure investments and new IT applications span business lines and function. Some organizations even integrated partners and customers into their internal processes.

### Key IT Governance Processes

According to Hamaker (2004), key IT Governance Processes are as follows. First, Strategic Planning and Alignment: IT steering committee/priority process; Alignment with business objectives; IT strategy and architectural standards; IT project tracking; Support for strategic enterprise initiatives.

Second, IT Operation: Applications development (Project management and System development life cycle); Production support (Production control and operation, Job scheduling, System backups); Technical architecture; Network design, management, and operations; Help Desk; Information security management; Business continuity and disaster recovery.

Third, Financials: IT operating budget; IT capital budget; IT asset management; IT contract management; IT resource allocation and planning. Fourth, Control Frameworks: Information management policies (Corporate – privacy, business process owners, records retention and IT department – SDLC, security); Standards – COBIT, ITIL, ISO, SAS70; Practices and procedures; System documentation management; Quality Assurance; Regulatory compliance (Escalation procedures and Disclosure procedures); Contract administration and vendor management.

### **The Need for IT Governance**

It is to be managed as a business by the business, the formal means by which management discharges into responsibilities – governance – is also applicable to the management of IT. While governance developments have been primarily driven by the need for the transparency of organizational risk and the protection of shareholder value, the pervasive use of technology has created a critical dependency on IT that calls for a specific focus on IT governance.

In most organizations, IT is essential to manage the transactions, information and knowledge necessary to initiate and sustain economic activities and to support, sustain and grow the business. As a consequence, the board of directors and top management need to understand the strategic importance of IT and ought to put governance firmly on their agenda. The overall objective of IT governance, therefore, is to understand the issues and the strategic importance of IT to enable the organization to sustain its operations and implement the strategies required to extend its activities into the future. At its core, IT governance is concerned about two responsibilities: delivering value and mitigating IT related risks.

### **IT Governance Environment**

IT Governance does not occur in a vacuum. Each IT governance implementation takes place in different conditions and circumstances (the IT governance environment) determined by a large set of factors, such as the organization's and the industry's ethics and culture; The ruling laws, regulations and guidelines, both internal and external; The mission, vision and values of the organization; The organization's models for roles and responsibilities; The organization's and the industry's governance policies and practices; The organization's business plan and strategic intentions.



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IT Governance Domains	Objectives	CoBIT Components to Assist	Implementation Tool Kit
<b>ALIGNMENT</b>	<b>DIRECT</b> Ability to build the capabilities necessary to deliver business value	• Business and IT key goal indicators	Documentation and reporting tools
<b>VALUE DELIVERY</b>	<b>CREATE</b> Successful delivery of business value	• Key performance indicators • CoBIT process framework • Critical success factors	
<b>RISK MANAGEMENT</b>	<b>PROTECT</b> Identification and mitigation risks to preserve value	• Control objectives • Control practices	
<b>RESOURCE MANAGEMENT</b>	<b>ACT</b> Establishment and deployment of IT capabilities for business needs	• Maturity model • Critical success factors • Control objectives • Control practices	IT governance implementation tools
<b>PERFORMANCE MANAGEMENT</b>	<b>MONITOR</b> Closing the feedback loop to redirect alignment if needed	• IT balanced scorecard • CoBIT benchmark • Maturity model • Audit guidelines	Information and presentation tools

Source: IT Governance Implementation Guide, page 19

Figure 2 IT Governance Life Cycles – Static View

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Figure 2 shows the IT governance domains and their related Control Objectives for Information and related Technology (COBIT) components in a static way. Because IT governance is considered a life cycle, the IT governance domains can also be represented more dynamically.

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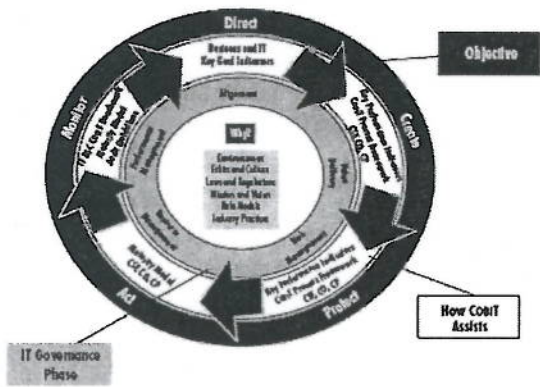


Figure 3 IT Governance Dynamic View

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Figure 3, in the dynamic view, the IT governance life cycle is shown as a wheel that can be bootstrapped at any point. The IT Governance Institute ([www.itgi.org](http://www.itgi.org)) advises that life cycle is best started from the IT strategic alignment domain. After the

bootstrapped startup, the organization should move into a continuous IT governance cycle. At regular intervals, the feedback loop should be closed, the strategy needs to be monitored and the results measured, reported and acted upon. Generally on an annual basis, the strategy is reevaluated and realigned if required.

## IT Governance Implementation Action Plan

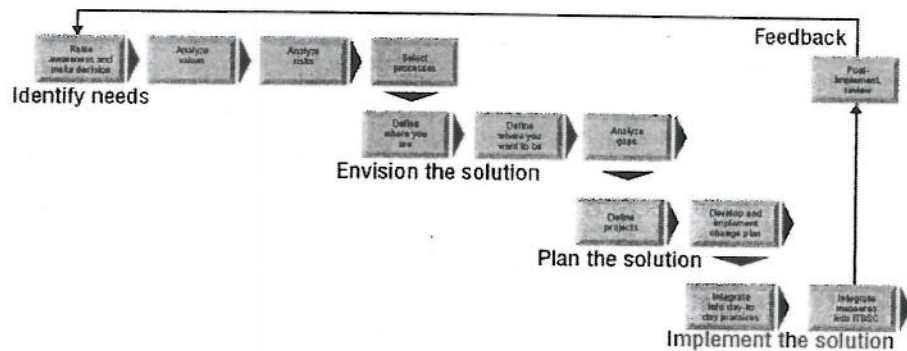


Figure 4 IT Governance Implementation Action Plan

### Phase 1 – Identify Needs

- Understand the background of the IT governance initiative, set measurable business objectives for the IT governance implementation project, raise awareness and define a proper project organization.
- Understand the business objectives and how they translate into IT objectives
- Understand the potential risks and how they translate into IT objectives.
- Decide upon the scope of the improvement project, and identify the IT processes to be implemented or improved.

### Phase 2 – Envision Solution

The current maturity of the selected IT processes must be assessed and the appropriate target maturity levels (as-is) must be assessed and the appropriate target maturity levels (to-be) are to be set. Based on the maturity attributes in the COBIT Control Objectives and Control Practices, the analysis of the gaps between the as-is and to-be positions are translated into improvement opportunities.

### Phase 3 – Plan Solution

The third phase of the road map identifies feasible improvement initiatives and translates them into justifiable projects. After approval, these projects should be integrated into an overall improvement strategy with a detailed plan to roll out the solution.



#### Phase 4 – Implement Solution

As the improvement plan rolls out, the sustainability of the delivery is guaranteed by the feedback provided by the post implementation review and the monitoring of improvements on the corporate and IT balanced scorecard.

## CONCLUSION

Effective enterprise governance focuses individual and group expertise and experience on specific areas, where they can be most effective. Information technology, long considered only an enabler of an organization's strategy, is now regarded as an integral part of the strategy. CEOs, CFOs and CIOs agree that strategic alignment between IT and enterprise objectives are a critical success factor. IT governance helps achieve this critical success factor by efficiently and effectively deploying secure, reliable information and applied technology. Information technology is so critical to the success of enterprises that it cannot be relegated to either IT management or IT specialists, but must receive the attention of both in coordination with top management.

Fundamentally, IT governance is concerned with two issues that IT delivery value to the business and that IT risks are mitigated. The first is driven by strategic alignment of IT with the business. The second is driven by embedding accountability into the enterprise.

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